

A National Agenda on the Environment and the Aging

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By 2030, the number of older Americans is expected to double to 70 million, largely as a result of the aging of the baby boomers. The rapid growth in the number of older Americans has many public health implications, including the need to better understand the potential risks posed by environmental exposures to older adults. For example, older adults, particularly those with pre-existing health conditions, are more sensitive to health effects of some air pollutants and waterborne pathogens than younger adults. In addition to these health risks, aging adults have different resource needs than younger adults. These needs will grow with the growth of this population, and they must be addressed in a manner that will promote the health of individuals and the health of the environment. In recognition of these issues, the Environmental Protection Agency, with its sister agencies, has begun to develop a National Agenda on the Environment and the Aging.

To address public health issues, the EPA has proposed the application of an environmental public health paradigm that seeks to better understand the determinants of and linkages between the external sources→human exposure→internal dose→early biological effect→adverse health effects for this population. Key data needs include the characterization of (1) behavior/activity patterns and the concentration of pollutants in the microenvironments in which older adults spend time; (2) changes in absorption, distribution, metabolism, and excretion that will define the dose reaching various target organs; and (3) alterations in reserve capacity that will alter the body's ability to compensate for the effects of environmental exposures. Understanding the contributions of these factors is critical to better understanding the policy implications of such risks, guiding environmental and public health strategies, and delineating the economic consequences of applying such strategies.

In addition, EPA hopes to help guide development of the built environment that will improve quality of life for the aging population while improving environmental quality. To do this, EPA needs to understand older adults' changing requirements for housing, health care (including increased use of pharmaceuticals and personal care products), and transportation and recreation needs and how these may alter demands on communities' infrastructures and the nature of stress on the environment. By working together with Federal agencies, community organizations, and private industry to share best practices and raise awareness about the need for more mixed use services and developments as it relates to aging and the environment, EPA hopes to encourage the creation of a range of environmentally friendly community choices for older adults. This abstract does not necessarily reflect EPA policy.